

AL

Notice of Allowability

Application No.

10/615,298

Examiner

Hoa C. Nguyen

Applicant(s)

FURUKAWA ET AL.

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 7/12/07.
2. ☐ The allowed claim(s) is/are 1,3,5,7 and 9-11.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

DETAILED ACTION

1. The request filed on 7/12/07 for a Request for Continued Examination (RCE) under 37 CFR 1.114 based on parent Application No. 10/615298 is acceptable and a RCE has been established. An action on the RCE follows.
2. The amendment filed on 7/12/07 has been entered. Applicants have amended claims 1, 3, and 5. Claim 11 is newly added. Claims 2, 4, and 6 are cancelled.

Response to Arguments

3. Applicant's arguments, see Remarks, pages 7-9, filed on 7/12/07, with respect to the amended claims 1 and 5 have been fully considered and are persuasive. The rejections of claims 1 and 5 have been withdrawn.

EXAMINER'S AMENDMENT

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows: Claim 8 is cancelled.

Allowable Subject Matter

5. Claims 1, 3, 5, 7, and 9-11 are allowed.

Reasons for Allowance

6. The following is an examiner's statement of reasons for allowance:
 - (a) Regarding claims 1, 3 and 9, the best prior art references Huang (US 6777819), Kemmochi (US 20040032704), and Fujimoto (US 20010006456), taken

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alone or in combination, fails to teach or fairly suggest, at least on claim 1, in combining with other limitations, a structure of a wiring substrate having a surface acoustic wave filter that is fastened face up to the one side of the wiring substrate, a semiconductor chip that is fastened face down to one side of the wiring substrate, and a bonding wire connecting the connection terminal of the surface acoustic wave filter with the semiconductor chip or with one of the wiring patterns formed on one side of the substrate, in which the bonding wire has an inductance that eliminates ripples in a frequency band characteristic of the surface acoustic wave filter to which one terminal of the bonding wire is connected. None of the reference art of record discloses or renders obvious such a combination.

(b) Regarding claims 5, 7, and ¹⁰~~8~~10 the best prior art references Huang (US 6777819), Kemmochi (US 20040032704), and Fujimoto (US 20010006456), taken alone or in combination, fails to teach or fairly suggest, at least on claim 5, in combining with other limitations, a structure of a wiring substrate having a semiconductor chip mounted face up on one side of the substrate, a surface acoustic wave filter fastened also face up mounted on the one side of the substrate, and a bonding wire having one terminal connected to the surface acoustic wave filter and the other terminal connected to the connection terminal of the semiconductor chip, in which the bonding wire has a specific inductance that eliminates ripples in a frequency band characteristic of the surface acoustic wave filter.

(c) Regarding claim 11, the best prior art references Huang (US 6777819), Kemmochi (US 20040032704), and Fujimoto (US 20010006456), taken alone or in

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combination, fails to teach or fairly suggest, at least on claim 11, in combining with other limitations, a structure of a wiring substrate having a surface acoustic wave filter, which is fastened face down to the one side of the wiring substrate, a semiconductor chip, which is fastened face up to the one side of the wiring substrate, and a bonding wire connecting the connection terminal of the surface acoustic wave filter with the semiconductor chip or with one of the wiring patterns formed on the one side of the wiring substrate, wherein the bonding wire has an inductance that eliminates ripples in a frequency band characteristic of the semiconductor chip, to which one terminal of the bonding wire is connected. None of the reference art of record discloses or renders obvious such a combination.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoa C. Nguyen whose telephone number is 571-272-8293. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-1984. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hoa C. Nguyen
8/30/07



TUAN T. DINH
PRIMARY EXAMINER